

NATIONAL COMMITTEE ON BIOSAFETY OF THE PHILIPPINES

YEAR-END REPORT

January to December 2000

NCBP ACTIVITIES

A. NCBP Meetings

During the report period, the NCBP met twelve (12) times including meetings with the proponents of the Planned Release Proposal and an NCBP workshop.

B. Risk Assessment

The NCBP evaluated and/or approved twenty-seven (26) applications for research/requests for importation of regulated materials, to wit:

- 5 research proposals for approval and recommendation to the Plant Quarantine Service, Bureau of Plant Industry (BPI), the issuance of permit to import biological/transgenic materials to be used in the research proposals;
- 2 proposals for field testing of GMOs;
- 7 research proposals for approval of their implementation;
- 9 requests/research proposals which the Committee deferred action, pending compliance with other NCBP requirements;
- 1 approved field testing of Bt corn by Pioneer Hi-Bred, Phils. Inc.;
- 1 joint application for field testing of Xa-21 rice by IRRI and Philrice;
- 1 application for multi-location field testing of Yieldgard corn; Public Information Sheet for multi-location field testing of Yield Gard corn in 31 sites were approved for posting and publication purposes only; the NCBP has yet to act on the merits of the proposal.

See Annex A, B & C for details.

C. IBC Matter

The NCBP approved the composition of the following Institutional Biosafety Committees (IBCs):

- a) NOVARTIS
- b) MONSANTO Philippines, Inc.
Northern Luzon, Northern Mindanao, Southern Mindanao (40 areas)
- c) Reconstitution of CLSU-IBC
- d) Reconstitution of the PHILRICE-IBC
- e) IPB/Pioneer Hi-Bred, Philippines, Inc.
- f) Reconstitution of IRRI-IBC
- g) Reconstitution of UPLB-IBC

D. NCBP Inspection/Visit

During the year, the NCBP inspection team visited the following laboratories and facilities as well as the proposed field testing sites, where experiments/field testing of GMOs will be carried out.

- March 4-7, 2000, AGROSEED, Gen. Santos City: Monitoring of the approved field testing of Bt corn.
- March 18-20, 2000, AGROSEED, Gen. Santos City: To supervise the harvesting and incineration of all plant materials and to ensure that all conditions imposed by the NCBP with respect to the field testing of Bt corn are complied with.
- September 17-19, 2000, South Cotabato and Bukidnon: Inspection of the proposed sites for the field testing of Bt corn by Pioneer Hi-Bred, Philippines, Inc.
- November 9-12, 2000, Isabela: Inspection of the proposed sites for the multi-location field testing of Bt corn.
- November 13-15, 2000, Bukidnon: Inspection of the proposed sites for the multi-location field testing of Bt corn.
- November 20-22, 2000, South Cotabato: Inspection of the proposed sites for the multi-location field testing of Bt corn.
- November 25-27, 2000, Ilocos Norte and Pangasinan: Inspection of the proposed sites for the multi-location field testing of Bt corn.
- December 1-2, 2000, Camarines Sur: Inspection of the proposed sites for the multi-location field testing of Bt corn.
- December 8-10, 2000, Bukidnon: Inspection of the proposed sites for the multi-location field testing of Bt corn.

E. NCBP Biosafety Workshop:

The Workshop was conducted last 1-2 September 2000 at Caylabne Bay Resort, Ternate, Cavite. Among the highlights of the workshop are :

1. presentation of the significant international and local regulatory bodies governing GMOs, giving its significance and limitations. These international bodies are the Cartagena Protocol, which is still in the process of ratification and Codex Alimentarius which on the other hand, is still under review and negotiation, and the local regulatory framework, the EO 430, creating the NCBP.
2. Proposals to make NCBP more effective with its functions to be able to cope with the fast pace developments in biotechnology were made to attain the workshop's objective.

3. A proposed modification in the procedure for the submission of proposals was also designed during the workshop that will further be taken up in the upcoming NCBP/inter-agency meeting.
4. The protocols for public consultation and the monitoring of field trials and the Consumer Act of the Philippines were also highlighted.

F. Reconstitution of the National Committee on Biosafety of the Philippines.

The newly reconstituted members of the NCBP was appointed by the President of the Republic of the Philippines last 22 June 2000 and took their Oath of Office with Secretary Filemon A. Uriarte, Jr. DOST Secretary in July 2000.. The members shall serve the Committee for a term of three (3) years – July 1 2000 to 30 June 2003.

G. Liason/coordination activities

The Secretariat continued its liaison with the IBCs, relevant regulatory agencies, government and private research institutions engaged in genetic engineering.

H. Invitations to NCBP members to participate/serve as resource person:

- *Symposium: The Biotechnology Revolution – Are we up to the Challenge?*, 26 January 2000.
- *Workshop on Science & Technology Information on Biosafety*, Bangkok,Thailand, 10-14 January 2000.
- *Briefing on the Cartagena Protocol on Biosafety*, Carlos P. Garcia Conference Room, DFA, 16 February 2000.
- *Symposium on Genetically-Modified Crops and Food Products*, Marine Science Institute, UP Diliman, 19 February 2000.
- *Seminar on Modern Biotechnology (Genetic Engineering)*, Senate Building, Pasay City, 23 February 2000.
- *PI SIGMA Fraternity-LSK & YSDA-Pilipinas, Inc.'s student forum on POPs and GMOs*, Student Centre, UP Manila, 17 March 2000.
- *Meeting with USDA Deputy Usec. James Schroeder to discuss the current biotechnology situation in the Philippines*, Shangri-La, Makati, 21 March 2000.
- *International Best Practices in Biotechnology Regulation and Philippine Application*, ITCAF Conference Room, DA, 23 March 2000.
- *China Agricultural & Food Biotechnology Conference*, Great Wall Sheraton, Beijing, 3-5 April 2000.

- *ASEAN Regional Workshop on Biosafety of GMOs*, Kuala Lumpur, Malaysia, 24-26 April 2000.
- *Pest Management in the New Millenium: Vision, Commitment and Challenge in Modern Agriculture (PMCP's 31st anniversary & annual scientific convention)*, Hotel Supreme, Baguio City, 3-6 May 2000.
- *Meeting with USDA-FAS Biotechnology Team*, Ayala Life-FGU Building, Makati City, 5 June 2000.
- *International Symposium on Bioplaguicides*, Ho Chi Minh City, Vietnam, 19-21 June 2000.
- *Biotechnology Uses and Applications in Agriculture, Food and Health (organized by PSBMB)*, UP Baguio, 28 June 2000.
- *15th Australian Biotechnology Conference, ABA 2000*, Brisbane, Australia, 2-6 July 2000.
- *Symposia on Biotechnology for Local Government Executives and Legislators, Farmer Leaders and Extension Workers*, South Cotabato, 10-12 August 2000.
- *Forum on Biotechnology/Genetically Modified Organisms (GMOs)*, PBSP Head Office, Intramuros, Manila, 25 August 2000.
- *Media Forum on Biotechnology*, Dusit Hotel Nikko, Makati City, 7 September 2000.
- *Science Information Forum on Human Genome*, Casino Español, Ermita, Manila, 11 September 2000.
- *Training Workshop on Public Information Awareness for Biotechnology in Agriculture & Natural Resources*, Matina Aplaya, Davao City, 18-20 October 2000.
- *Impact of Biotechnology & Regulatory Framework on Oilseeds & Grains, Markets & Trade*, Grand Hyatt, Singapore, 19-20 October 2000.
- *7th ASEAN Food Conference*, EDSA Shangri-La, Manila, 20-22 November 2000.
- *BIOTECHNOLOGY Part II* of the TV program *Kaalamang Kabuhayan (KKB)*, PTV-4.
- *Review of the BAI-PCARRD's "Guideline/Requirement for the Establishment of a Veterinary Biological Product Research and Development Laboratory"*, Phil. Animal Health Center, BAI Compound, Quezon City, 25 October 2000.
- *Consultation on the proposed "Rules & Regulations for the Importation & Release into the environment of Plant & Plant Products Derived from the Use of Modern Biotechnology"*, Bureau of Soils & Water Management, Quezon City, 29 November 2000.
- *International Workshop on "WTO, Uruguay Round and Future Negotiations on Trade in Agriculture"*, SEARCA-UPLB, 3-7 December 2000.

•*Zonal Seminar-Workshop on Biotechnology, VISCA, Baybay, Leyte, 6-7 December 2000.*

•*1st Meeting of Intergovernmental Committee for the Cartagena Protocol on Biosafety, Montpellier, France, 11-15 December 2000.*

JULIETA FE L. ESTACIO
Secretariat, NCBP

NOTED:

ROGELIO A. PANLASIGUI, Ph.D.
Undersecretary for R&D
And Chairman, NCBP

APPROVED PROPOSALS WITH REQUEST FOR IMPORTATION OF BIOLOGICAL MATERIALS

(ANNEX A)

CONTROL NO.	PROJECT TITLE	PROPONENT/INSTITUTION	DATE REC'D	REMARKS
980101	Green Leafhopper Inoculation of Transgenic Rice with Potential Resistance to the Rice Tungro Spherical Virus	Dr. Leocadio S. Sebastian Philippine Rice Research Institute (PHILRICE)	10-09-98	10 Feb 1999 - Recommended issuance of permit to import: transgenic rice seeds: Taipei 309 (japonica type) and IR72 from the International Lab. For Tropical Biotechnology (ILTAB) of the Scripps Research Inst., La Jolla, California, USA
970080	Proposal for importation of a biological control agent, <i>Procecidochares connexa</i> against <i>Chromolaena odorata</i> (Hagonoy) infesting coconut plantation in the Philippines	Emmanuel D. Aterrado PCA-DAVAO	03-03-99	The NCBP, during its 24 March 1999 meeting, approved the proposed activity and recommended to the PQS, the issuance of permit to import <i>Procecidochares connexa</i>
990104	Evaluation of the activity of <i>Arabidopsis thaliana</i> tapetum-specific A9 gene promoter driving <i>gusA</i> reporter gene in transgenic rice and tobacco	Dr. Nenita V. Desamero PHILRICE	04-12-99	During the 11 May 1999 mtg., the NCBP decided to recommend to the PQS, the issuance of permit to import : transgenic rice seeds and in vitro regenerative putative transgenic tobacco plants from the Center for the Application of Molecular Biology to International Agriculture (CAMBIA), Canberra, Australia
990105	Agrobacterium-mediated transfer of <i>gusA</i> reporter gene driven by tapetum-specific A9 and <i>osg6B</i> promoters to indica rice and tobacco	Dr. Nenita V. Desamero PHILRICE	04-12-99	-do-

CONTROL NO.	PROJECT TITLE	PROPONENT/INSTITUTION	DATE REC'D	REMARKS
990108	Evaluation of transgenic plants with viral DNA sequences for their resistance to rice viruses, in particular to rice tungro disease – Part II	Dr. Ossmat Azzam International Rice Research Inst.	5-12-99	Approved, 15 Dec. 1999
990112	Control of Ripening in Papaya and Mango by Genetic Engineering – Part II	Evelyn Mae Mendoza Inst. of Plant Breeding (IPB), UPLB	08-25-99	Approved, 25 Aug. 1999, to import transgenic papaya plantlets and to continue the research activities on the remaining transgenic papaya plantlets from the lab of Dr. Botella
990117	Use of mannose selection in rice transformation	Dr. Swapan K. Datta/IRRI	11-23-99	Approved, 15 December 1999
990119	Iron fortification of rice using the ferritin gene	Dr. Awapan K. Datta/IRRI	11-23-99	Approved, 15 December 1999
PR001-98	Efficacy Verification Trials of Bt Transgenic Corn Hybrids Against Corn Borer, <i>Ostrinia furnacalis</i> guenee in the Philippines	Dr. Samuel Dalmacio/ Dr. Eduardo Fernandez Pioneer Hi-Bred Philippines, Inc. Inst. of Plant Breeding - UPLB	Sept. 9, 1998	Approved, Aug. 25, 1999 subject to compliance with all the NCBP requirements.
PR002-98	Field Bioefficacy Verification of Transgenic Corn Against Asiatic Corn Borer, <i>Ostrinia furnacalis</i> Guenee in the Philippines	Dr. Manuel Logrono Dr. Eduardo Fernandez Agroseed Corp. (formerly Cargill) Institute of Plant Breeding-UPLB	12 October 1998	Approved, Aug. 25, 1999

PROPOSALS APPROVED FOR IMPLEMENTATION

(ANNEX B)

980091	Establishment of Transformed Root and Other Organ Cultures of Selected Philippine Plants for their Secondary Products	Dr. Lourdes B. Cardenas Institute of Biological Sciences, UPLB	3-25-98	NCBP, during the, 10 Feb. 1999 mtg., decided that the proponent will be allowed to transfer the venue of the proposed activities to IRRI, provided some conditions are met
960067	Transformation of Rice (<i>Oryza sativa</i> L.) Using Potato Proteinase Inhibitor II for Insect Resistance (Request for permission to transfer the putatively transgenic rice plants from the Philrice Los Banos tissue culture room to the Philrice, Maligaya transgenic greenhouse)	Dr. Rey Ebor BIOTECH	03-10-99	Approved, 24 March 1999
990109	Plasmid constructs suitable for transformation of cultures plant cells and tissues through biolistics and evaluation of transient expression (revised)	Dr. Surya K. Manohar UP Diliman	05-04-99	Approved, 3 Nov. 1999, subject to compliance with the required level of containment (BL1) and autoclaving and incineration of plant tissues and soil used in the experiment
990110	Establishment of a model biolistics-based transformation system of cultured plant cells and tissues for the development of Philippine banana cultivars through transgenic applications (revised)	Dr. Surya K. Manohar UP Diliman	05-04-99	-do-

990113	The use of Rh(phi) ² DMB ³⁺ to repair thymine dimers in pUC 18 plasmids as determined by CD or other spectroscopic techniques	Dr. Eva Marie A. Ratilla/UPD	09-07-99	Approved, 15 Dec. 1999
990116-A	Generation of Humanized Single Gene-encoded antibodies, with varied effector functions for direct use as antitumor reagents, and for production of immunoliposomes (ANTIBODY TECHNOLOGY)	Dr. Ameurfina Santos/NIMBB-UP Diliman Dr. Virginia Monje/NIMBB-UP Diliman	10-14-99	Given conditional approval, 3 Nov. 1999
990116-B	Discovery and development of anticancer drugs and other agents for immunoliposome-mediated delivery to breast cancer cells (ANTICANCER DRUG TECHNOLOGY)	Dr. Gisela Concepcion, UP-MSI Dr. Rhea Samonte, UP-NSRI Dr. Angela Cruz, UP-MSI	-do-	-do-
990116-C	Discovery and development of anticancer drugs and other agents for immunoliposome-mediated delivery to breast cancer cells (ANTICANCER DRUG TECHNOLOGY)	Dr. Gisela Concepcion, UP-MSI Dr. Rhea Samonte, UP-NSRI	-do-	-do-
990123	Development of Transgenic Papaya Varieties Resistant to Papaya Ringspot Virus (PRSV)	Dr. Violeta N. Villegas/IPB-UPLB	12-02-99	Approved, 15 Dec. 1999

(ANNEX C)

PROPOSALS ASSESSED BY THE NCBP & DEFERRED ACTION PENDING COMPLIANCE W/ OTHER REQUIREMENTS

Labiofam	Request for a laboratory test on the larvicidal activity of the products: <i>Bactivec</i> and <i>Griselesf</i>	Mr. Oscar S. Aniceto Mission Hills Pharma, Inc.	11-6-98	Discussed during the 20 Jan. 1999 meeting; Requires the proponent to submit additional information to fully evaluate the proposal
Kapital Finanz	Importation of the bioremediation agents: "Achieve", "MS 2.5" and "Bacteria BC 101"	Mr. David Austen de Montaigne KAPITAL FINANZ A.G.	12-02-98	The Committee, during the 10 Feb. 1999 meeting, decided to defer action pending submission of additional documents
990102	Proposal to import redworm <i>Eisenia foetida</i> and <i>Amyntas Hawayanus</i> to be used for the conversion of garbage into an organic fertilizer (wromy casting)	Mr. Herbert Gassner Sun and Water Technology Phils. Corp.	02-25-99	Deferred action, 24 March 1999, pending submission of additional information
990103	Serrlim Corporation Vermiculture, Vermicasting Production and Garbage Conversion	Mr. Jesuslino DL Serranilla SERRLIM CORPORATION	3-30-99	Deferred action, 25 August 1999
990106	DNA Immunization with Conserved and/or Promiscuous B and T cell Epitopes from Various Stages of <i>Plasmodium falciparum</i>	Dr. Celia T. Villanueva U.P. Diliman	05-05-99	Deferred action, 25 Aug. 1999, pending compliance and/or receipt of additional information
990107	Development of DNA Vaccines Against Dengue Virus	Dr. Celia T. Villanueva U.P. Diliman	05-05-99	-do-

990111	Assessing opportunities for biological nitrogen fixation in rice – Transformation of rice with legume nodulin genes to study the genetic predisposition of rice for forming nodular symbiosis with rhizobia	P. M. Reddy & J. K. Ladha International Rice Research Institute	8-20-99	Deferred discussion, 25 Aug. 1999
990115	TLB Fertilizer for Experimental Use Permit	Nestor P. Caoili Pine Valley Corp.	07-22-99	Deferred action, 25 Aug. 1999
990114	TLB Fertilizer for Experimental Use Permit	Silvestre C. Afable Paradigm Development Corporation of the Philippines	07-22-99	Deferred action, 25 Aug. 1999
990118	Development of indica transgenic rice with genes required for Beta-carotene genes from japonica to indica cultivars	Dr. Swapan K. Datta/IRRI	11-23-99	Discussed/deferred action, 15 December 1999
990120	Improvement of the nutritional quality of Philippine rice varieties through the introduction of Beta carotene (provitamin A) genes	Dr. Leocadio Sebastian/Dr. Renando Solis/PHILRICE	11-26-99	Discussed/deferred action, 15 December 1999
990121	Studies on fruit shelf life in Ecuador dwarf bananas genetically-modified to down-regulate ethylene production	Armenia B. Mendoza/DOLE Asia	12-02-99	Discussed/deferred action, 15 December 1999
990122	Evaluation of fungal tolerance and yield components in genetically modified Ecuador dwarf bananas expressing antifungal proteins DM-AMP1 and Ace-AMP1	Armenia Mendoza/DOLE Asia	12-02-99	Discussed/deferred action, 15 December 1999
990126	Proposal to import species of worms	Mr. Roy Lotzof/Tennant Trading	11-12-99	Discussed/deferred action, 15 Dec. 1999

